

FY2016

# YOUR CONSERVATION REPORT



## WISCONSIN DEPARTMENT OF NATURAL RESOURCES

### SECURING A LEGACY OF HABITAT CONSERVATION IN MANITOBA

April 2015 to March 2016 Conservation Report

Submitted by Ducks Unlimited Canada and Ducks Unlimited Inc.



# OVERVIEW

This report highlights DUC's habitat accomplishments within Manitoba's Minnedosa, Killarney and Virden priority areas during the period of April 1, 2015 to March 31, 2016.

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### **Ducks Unlimited (DU) is the world leader in wetland conservation.**

Since 1937, DU has invested over two billion dollars in waterfowl and wildlife habitat conservation in the United States, Canada and Mexico. In Canada alone, DU has completed over 9,560 habitat projects, securing 6.4 million acres and positively influencing over 116 million acres of habitat that benefit waterfowl, wildlife and people. Besides waterfowl, numerous species of wildlife, including many threatened or endangered species live and flourish on DU projects.

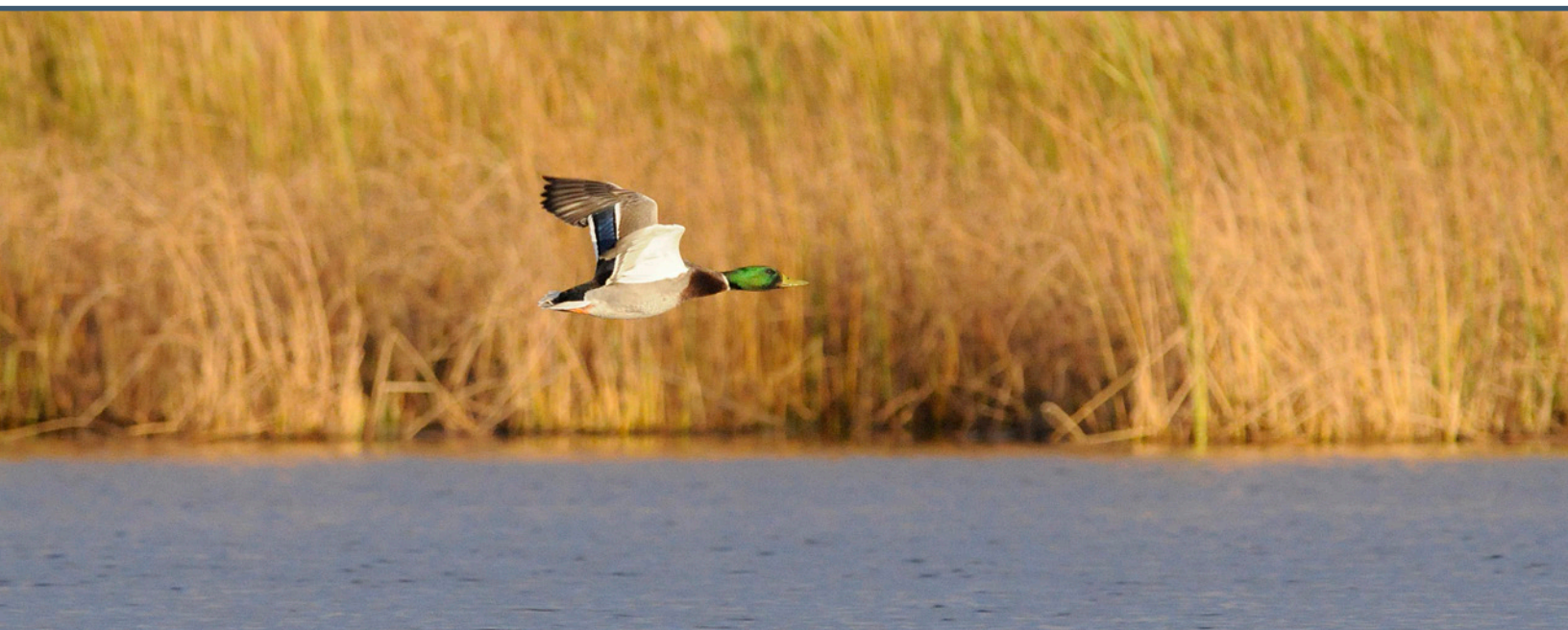
The Wisconsin Department of Natural Resources (WDNR) has contributed to waterfowl conservation on the Canadian Prairies since 1968. This partnership with DU recognizes the importance of Canadian waterfowl production to Wisconsin hunters.

### **Over the past 49 years, Wisconsin has contributed \$5.5M to this effort.**

In April 2015, DU requested funding from the Wisconsin Department of Natural Resources in response to the critical waterfowl needs of the Manitoba Prairie Pothole Region (PPR). This request was for the amount of \$400,000 to support DUC's conservation efforts in FY2016-FY2017 on these breeding grounds. WDNR subsequently contributed \$146,530 to support this important work.

This final report highlights WDNR funding combined with state funding from Florida, Kentucky and Missouri totaling \$506,530. This was matched by DU and the combined total matched by the North America Wetlands Conservation Act (NAWCA), and other partners to realize \$2,026,120. With a strengthening US dollar we applied an exchange gain of 1.3 on the funding resulting in \$2,633,956 CAD in support of conservation efforts in the Manitoba PPR priority areas and surrounding landscapes.

*\* April 1, 2015 to March 31, 2016*



# BASED ON SOUND SCIENCE

## SOUND SCIENCE

DUC uses the best scientific research available to direct, evaluate and modify DUC's conservation programs and practices so that DUC can most effectively meet the conservation needs of waterfowl in the PPR. This union of science and conservation sets DUC apart from other non-government conservation organizations in Canada.

DUC has led the last 20 years of *waterfowl breeding research as related to habitat conditions* in the Canadian PPR. Scientists searched over 350,000 acres of habitat for nests, radio tracked 3,920 mallard hens and located and determined the nesting fate of over 10,000 nests. This information has greatly increased our understanding of nesting duck habitat selection and success and facilitated program adaptation and planning to maximize efficiency and implementation.

The research supports DUC's efforts to develop strategic waterfowl habitat conservation plans that are implemented and evaluated using a *waterfowl productivity model*. Based on the model, DUC has defined waterfowl needs for its priority landscapes in the PPR and specifically, habitat actions needed to restore duck populations within these landscapes. These needs are represented in the habitat objectives set out in the *PHJV Implementation Plan*.

DUC, Canadian government and industry partners have committed to research to better understand landscape change. Studies on wetland loss, nutrient loading, flood prediction and carbon sequestration has been a recent focus of DUC's science effort. This work has led to valuable science that is currently guiding changes to wetland protection, watershed planning and agricultural programs on the Canadian prairies.

**Wetland conservation that benefits our environment, economy and future and that is based on sound science will further help to sustain North America's waterfowl populations.**



## YOUR SUPPORT IS KEY

WDNR funding provides a significant contribution to the goals of the PHJV. Although much remains to be accomplished, this funding is critical to our joint efforts to reach these important goals.



DUC is a proud partner of the NAWMP. The PHJV, a partnership led by federal and provincial governments, DUC, Nature Conservancy of Canada and Wildlife Habitat Canada, has collaborated on waterfowl conservation under NAWMP in Prairie Canada since 1986. DUC leads the delivery of conservation programs and science to support NAWMP goals on the Canadian Prairies. The success of DUC's programs in Manitoba, particularly in the prairie pothole-laden target areas, are critical in supporting the NAWMP goal of achieving sustainable waterfowl production. The PHJV goal is to protect, restore and enhance an additional 15 million acres over the next 25 years of the NAWMP.

# PRIORITY AREAS

## BAND RECOVERIES

Origin of ducks harvested in Wisconsin from 1986–2012.



**Manitoba is an important source for waterfowl migrating to Wisconsin.**

Waterfowl band recovery data has clearly established that waterfowl produced and banded in Manitoba comprise a substantial proportion of the overall waterfowl population of the Mississippi Flyway. Data further supports that DUC's conservation priority areas, supported by the WDNR funds, are a primary source for waterfowl harvested in Wisconsin.

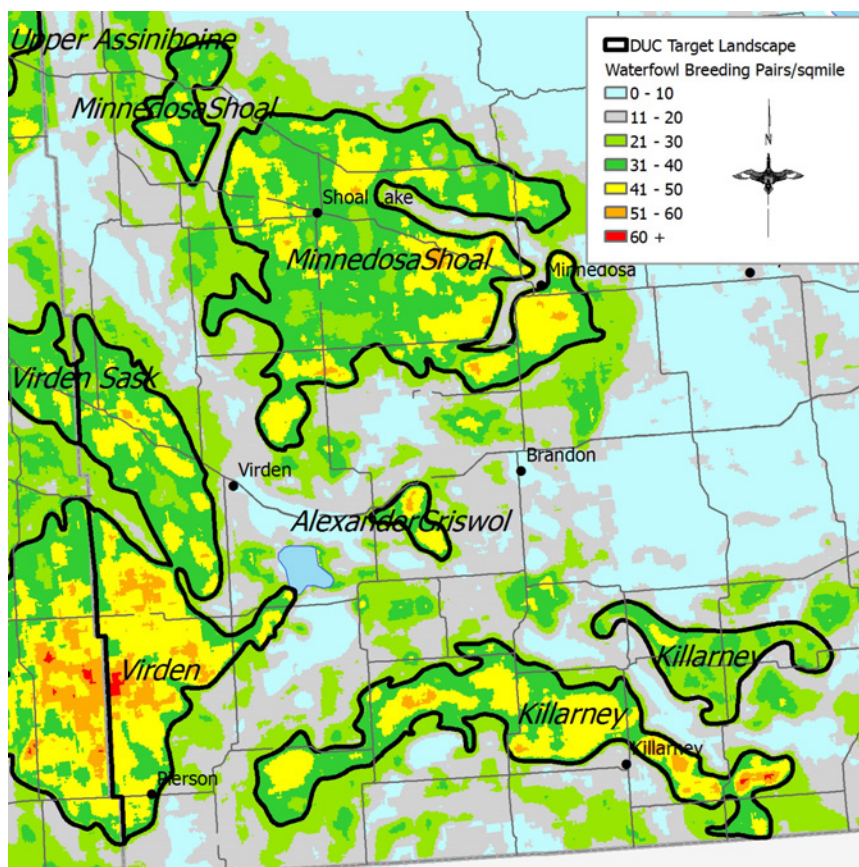
**Efforts must strategically target the 'best of the best' of these habitats to most effectively benefit waterfowl populations.**

The highest densities of breeding ducks in North America occur in the Prairie Pothole Region (PPR) of Canada. Located within the PPR are the Prairie and the Aspen Parkland Eco-regions of Manitoba, which are composed of a diversity of wetland and upland habitats. These habitat characteristics make this area key to waterfowl production and provide a basis to strategically deliver conservation programs. Although the value of habitats across the PPR have been degraded and continue to be at risk, based on the U.S. Fish and Wildlife Service survey data, the PPR and particularly these priority areas, continue to stand out as the *'best of the best'* breeding habitats in North America.

Key priority areas within the PPR of Manitoba have been selected as the focus for WDNR funding. These include the Minnedosa, Killarney and Virden priority areas (see map below).

## WATERFOWL BREEDING

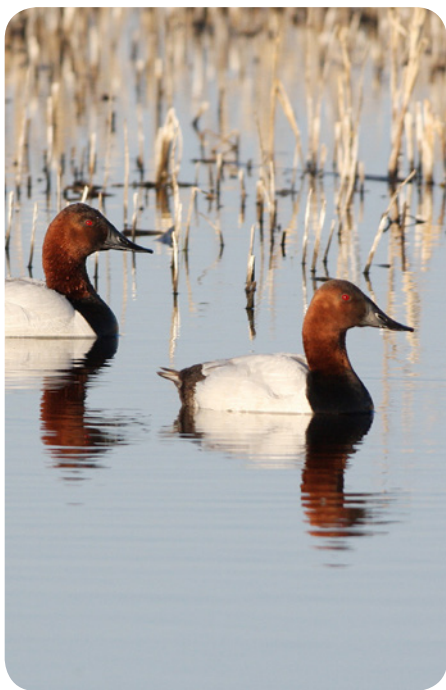
Breeding duck density and distribution within the PPR of Manitoba. Yellow and red areas represent the highest duck densities in the province. This map is based on over 50 years of U.S. Fish and Wildlife Service survey data and represents average waterfowl distribution over the long term.



# ACCOMPLISHMENTS

## FUNDING

The WDNR's contribution of \$146,530 toward the priority areas in the Manitoba prairie pothole region was matched by DU, NAWCA and other partner funds totaling \$2,026,120. Exchange gain of 1.3 resulted in \$2,633,956 CAD expended.



DU and NAWMP remain focused on the PPR of Canada and Canadian partners continue to grow their support with long term match at 50% of the total funds expended under the NAWMP in Canada.

Based on the FY2016 request to WDNR, DUC has delivered against specific objectives for the following habitat initiatives in Manitoba.

Habitat Initiative	Goals (acres)	Accomplishments (acres)	Program Costs (\$)
Habitat Retention	2,000	5,405	\$1,589,807
Wetland Restoration	65	96	\$173,718
Upland Restoration	2,500	1,081	\$244,374
Habitat Asset Management*	89,100	113,570	\$674,284
<b>Total</b>	<b>4,565</b>	<b>6,582</b>	<b>\$2,633,956</b>

\* Habitat Asset Management acres are not incremental and are therefore not included in the total acre goals.

## Habitat Retention

Drainage of wetlands and breaking of native grass uplands continue to be the most significant activities negatively impacting waterfowl. DUC uses a variety of program tools to protect remaining habitats that are vital to the long-term waterfowl productivity of Manitoba.

*Conservation easements and agreements* - protect habitats on private lands by offering financial incentives for varying levels of protection. All conservation easements are perpetual and are mostly done in partnership with provincial and federal government agencies. Conservation agreements are all a minimum of 10 years and many were secured for less than a \$35 per acre investment by DU.

*Land purchase* - is the most intensive program that DU delivers and is an important tool to protect highly valued habitats at high risk. As the cost of purchasing land continues to rise, DU invests in habitat to ensure the greatest waterfowl benefits are derived.

*Rangeland stewardship* - are designed to positively impact the majority of existing grasslands in the priority areas under the control of private ranches. To protect these lands from loss, unique partnerships with ranchers were employed. Conservation agreements addressing the protection of existing native prairie habitats while offering incentives for environmentally sound improvements were a main focus.

*Revolving Land Purchase* - is a program tool whereby DU can purchase land to restore wetlands and grasslands and then sell the property with a perpetual conservation easement protecting all habitats. This tool is valuable in extending the impact of our conservation funding as well as achieving habitat protection and restoration in areas that are difficult to find willing landowners to restore habitat or sign conservation easements.

## WINTER WHEAT

Winter wheat, which is a fall-seeded crop, is particularly beneficial to northern pintails, a species that remains below long term populations since the late 1970s.



*Wetland rebuilds* - are a re-investment into existing wetland projects that are highly productive and successful for waterfowl. These projects have met and surpassed their original design and agreement terms and require new infrastructure and agreements to ensure their productive capacity for another 30 years. DU renews agreements with the landowners on the project and constructs or repairs the required physical improvements to maximize wetland productivity and waterfowl recruitment.

## Wetland Restoration

Most wetland restoration work occurs on private lands. More than 75 years of program delivery has taught us that it takes a combination of intensive and extensive programs to successfully work with producers. DUC is currently using other programs such as land purchase to initiate efforts to restore wetlands. Goals for wetland restoration increased this year due to drying conditions resulting in an increased opportunity to complete construction on a number of basins. DUC will continue to pursue wetland restoration opportunities that come available.

## Upland Restoration

Duck nest success is a major factor for influencing continental waterfowl populations. Improving nest success in the priority areas and surrounding PPR will require the restoration of grass to provide secure nesting habitat. DUC focused significant efforts on restoring perennial cover in the priority areas through two primary efforts:

*Forage conversion programs* - provide incentives to landowners to convert cultivated land to perennial cover to provide waterfowl nesting benefits and support the beef industry. For waterfowl, the increase in forage provides more nesting choices with better protection from predators.

*Winter wheat programs* - focus on the agronomic and economic benefits of the crop to the producer. Approaches vary from supporting research to developing new varieties that are more successful in the Canadian prairies, to working more directly with the producers through incentive or extension programs. DUC's research has confirmed that there are **24 times more ducks hatched in winter wheat** compared to spring wheat on a per acre basis.

## Habitat Asset Management

Because of DUC's success, we have amassed an inventory of 655,000 acres of habitat on 1,365 conservation projects in Manitoba. In order to ensure these projects return the maximum benefit to waterfowl an annual investment of resources is required. Habitat asset management activities include annual maintenance, grassland rejuvenation, water level management and repair of damaged water level management infrastructure.

# SECURING A LEGACY

Ducks Unlimited and the Wisconsin Department of Natural Resources are working together to conserve the 'best of the best' waterfowl habitats in Manitoba.



**Only through your support can we continue these important efforts.**

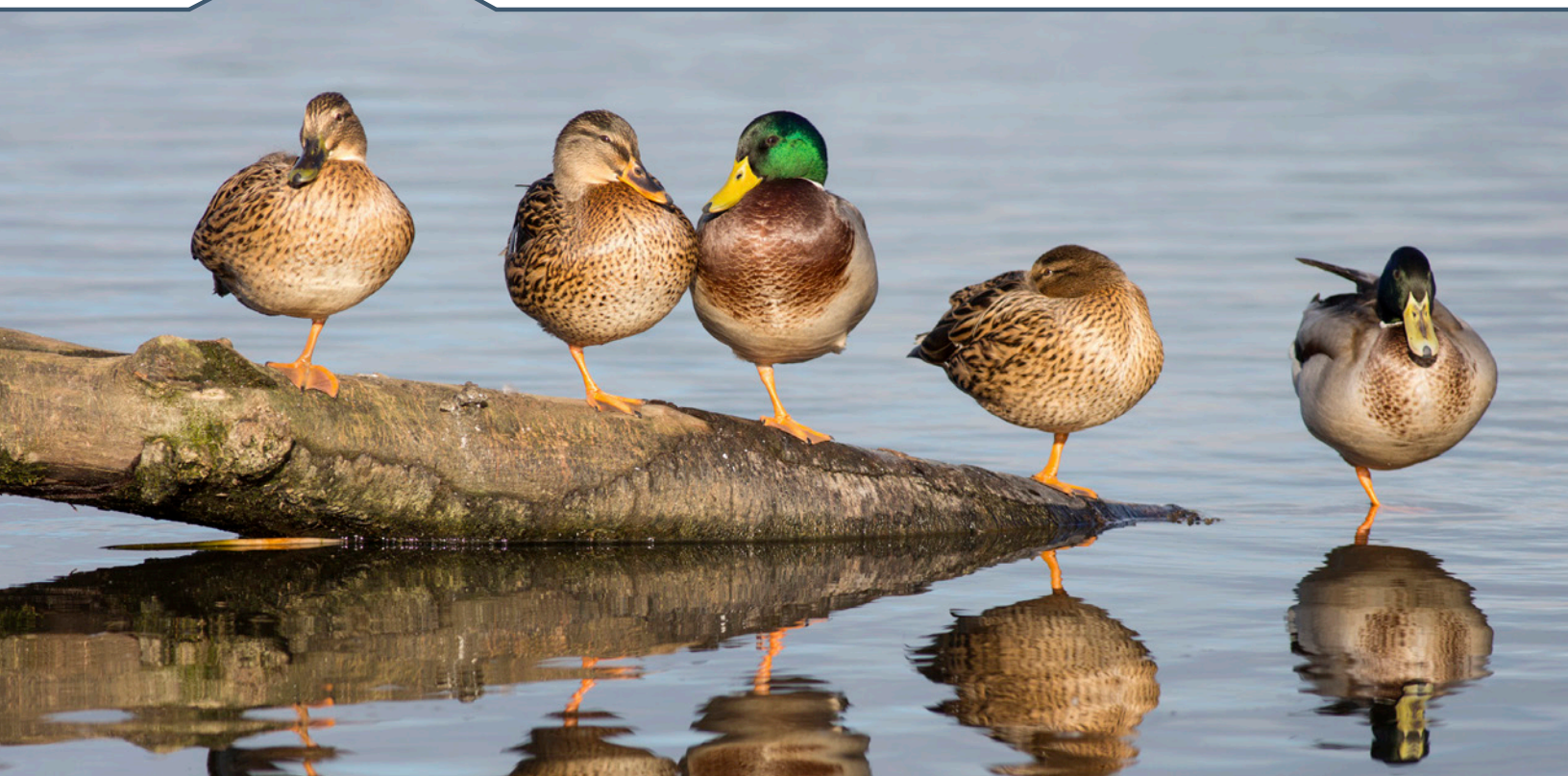
The *PHJV Implementation Plan* and DU have set habitat objectives to fully recover the Canadian Prairies and to sustain waterfowl production. Continued partnerships will be the key to success.

DU values its relationship with WDNR and recognizes them as a key player in supporting NAWMP conservation efforts in Canada. However, increased support from all partners is needed if the goals of NAWMP are to be met.

The waterfowl community continues to recognize habitat programs as the primary solution to waterfowl recovery. DUC is the primary delivery agent of the NAWMP program in the PPR of Canada.

**Your support and continued action on the Canadian Prairies means that critical waterfowl habitat will be protected in the top waterfowl production area of North America.**

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## APPENDIX - Accomplishment Details



Habitat Initiative	Direct Programs	Extension Programs	FY16 Total	FY16 Costs
	(Acres) <sup>1</sup>	(Acres) <sup>2</sup>	(Acres)	
<b>Habitat Retention</b>				
Conservation Easements	2,355	-	2,355	\$1,171,210
Land Purchase	99	-	99	\$173,718
Revolving Land Purchase (RLP)	790	-	790	\$111,265
Lease / Conservation Agmt	2,161	23,861	26,022	\$133,614
<b>Sub-total</b>	<b>5,405</b>	<b>23,861</b>	<b>29,266</b>	<b>\$1,589,807</b>
<b>Wetland Restoration</b>	<b>96</b>	<b>0</b>	<b>96</b>	<b>\$125,491</b>
<b>Upland Restoration</b>				
Conservation Forages	1,081	-	1,081	\$90,416
Winter Wheat	-	124,166	124,166	\$73,449
Nesting Cover Enhancement <sup>3</sup>	-	-	181	\$80,509
<b>Sub-total</b>	<b>1,081</b>	<b>124,166</b>	<b>125,247</b>	<b>\$244,374</b>
<b>Total Acres</b>	<b>6,582</b>	<b>148,027</b>	<b>154,609</b>	
<b>Habitat Management<sup>4</sup></b>			<b>113,570</b>	<b>\$674,284</b>
<b>Total Expenditure FY16</b>				<b>\$2,633,956</b>

<sup>1</sup> Direct programs – Programs whereby DUC directly impacts actions of producers, improves, or protects habitat.

<sup>2</sup> Extension/Influence – are acres impacted whereby DUC extends technical advice and influences land management decisions that are beneficial to both landowners and waterfowl habitat.

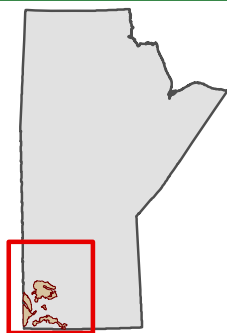
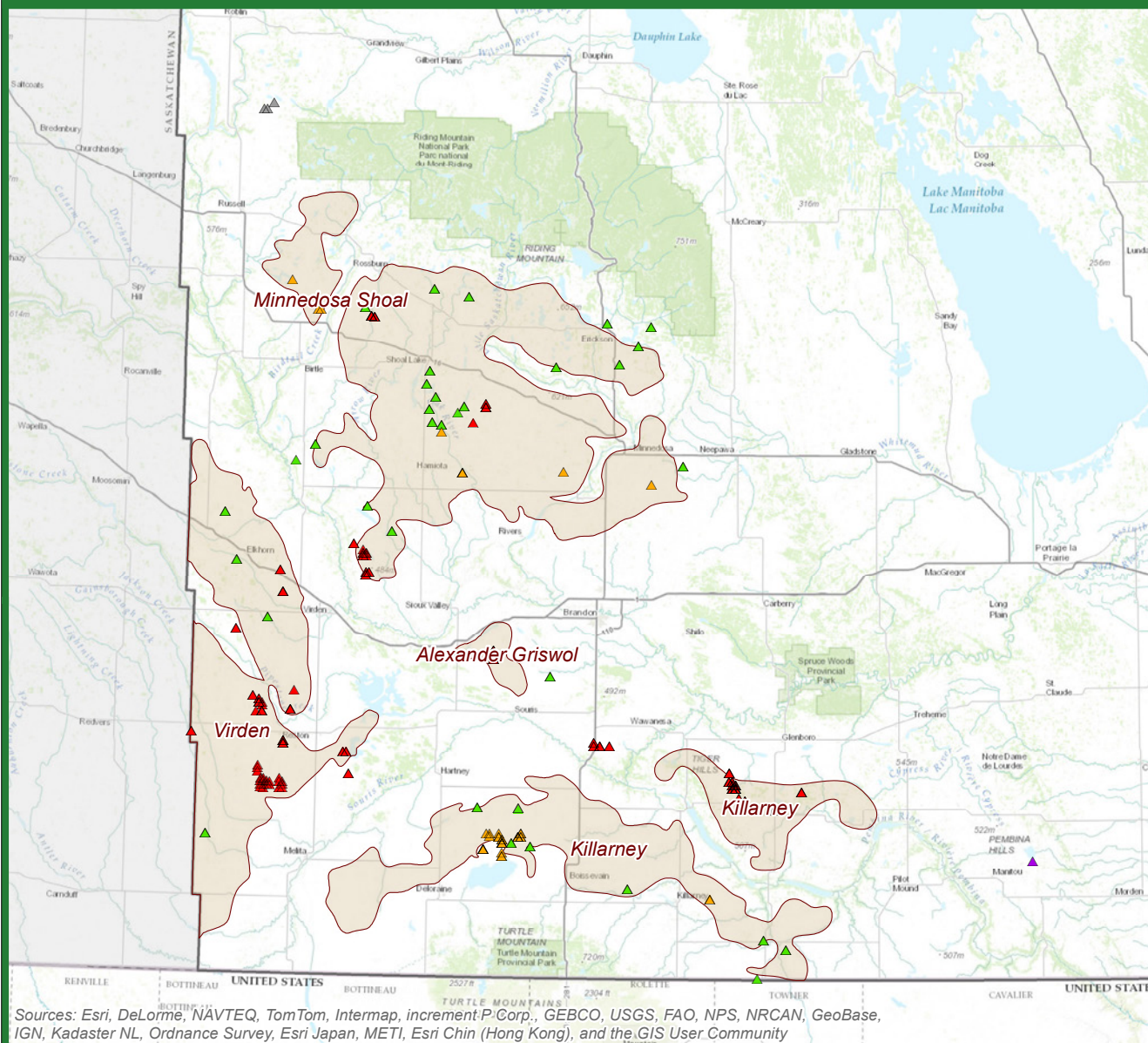
<sup>3</sup> Nesting Cover Enhancement - The acres in this category were previously secured and are not included in the total of habitat accomplishments.

<sup>4</sup> Habitat Management - These acres include the existing projects requiring annual management to maintain healthy habitats. The acres in this category are not included in the total of habitat accomplishments.



**Ducks Unlimited Canada**  
Conserving Canada's Wetlands

## Ducks Unlimited Canada Segments Secured in FY 2016 Manitoba



### Securement Method

- |                          |                        |                    |
|--------------------------|------------------------|--------------------|
| ▲ Purchase               | ▲ Lease                | DUC Priority Areas |
| ▲ Paid CE                | ▲ Management Agreement |                    |
| ▲ Conservation Agreement | ▲ Other Programs       |                    |



0 12.5 25 50 75  
Kilometers

NAD83 CSRS UTM Zone 14N

Sources:  
DUC Inventory, Ducks Unlimited Canada, 2016;  
World Topographic Map, Environmental  
Systems Research Institute (ESRI), 2016.